

## **REMARKS**

Claims 11-27 are pending. Claims 13-20 are withdrawn. Claims 11, 12, and 21-27 are rejected.

### **CLAIM REJECTIONS UNDER 35 U.S.C. §103**

Claims 11, 12, and 21-27 are rejected under 35 U.S.C. §103(a) as obvious over Sykes U.S. Patent No. 6,313,274 in view of Pinney.

Applicants respectfully disagree.

Sykes photoactivates proteins. More specifically, Sykes photoactivates in order to generate reactive -SH groups from S-S groups that are present in the protein. The reactive -SH groups are then used to link or conjugate the proteins to other groups. ("Photoactivation of Proteins for Conjugation Purposes" (Sykes title). "A protein containing one or more disulfide bonds, e.g., an antibody, is subjected to ultraviolet radiation to reduce one or more such bonds to reactive sulfhydryl groups; the resulting photoactivated protein is reacted with other chemical entity which is reactive with sulfhydryl, ..." (Sykes Abstract). "The methods describe herein make possible a simple, "one pot" preparation of an activated protein." (col. 4 lines 14-16). The preamble of each independent claim recites "A method of preparing a conjugate of a protein having one or more disulfide bonds..." Sykes protein is activated in a "reaction vessel" (col. 10 line 49) ("test tubes" (col. 17 Exs. 2-4)), and can be in "production quantities" of "bulk solution" or in "assembly lines" (col. 11 lines 11, 15, and 18, respectively, and col. 23 Exs. 110-112).

Sykes does not render Applicants' method obvious. Applicants' method administers a compound to a patient prior to activation, i.e., activation occurs *in vivo*; Sykes does not administer its compound to a patient prior to activation, activation occurs *in vitro*. Applicants' method administers a compound that can completely lack a protein (E-L-Ar-X-N<sub>3</sub>); Sykes requires a protein. If Applicants' compound contains a protein, the protein need not have one or more disulfide bonds. Applicants' method accumulates the compound in tissues of the patient, and then photoexcites the compound in the tissues of the patient to treat the tissues, i.e., causing cellular injury to the target tissue; Sykes completely lacks these steps.

Applicants also restate their position (October 23, 2008 Amendment) that Sykes completely omits an aryl azide because Sykes teaches that photoactivation of an aryl azide will affect the properties of the protein (antigen or antibody).

The secondary Pinney reference is also confined to *in vitro* methods. "In the MCF-7 human breast cancer cell line..." (Pinney Abstract), "rat uterine cytosol" (p. 2425 (B)). The secondary Pinney reference is also labeling the estrogen receptor with the goal of "inactivation of the receptor", as the Examiner noted. Were Applicants' receptor inactivated, Applicants' compound would not bind; thus, Pinney teaches away from Applicants' method. For at least these reasons, it cannot cure Sykes' deficiencies.

Because Sykes in view of Pinney does not render claims 11, 12 and 21-27 obvious, Applicants respectfully request the rejection be withdrawn.

## **CONCLUSION**

The application is believed to be in condition for allowance. Because Applicants have not amended claims, but rather have supplemented and clarified their previous remarks, they do not believe

the fee to Request Continued Examination is necessary. Thus, no fees are believed due but, if deemed necessary, the Office is authorized to charge them to Deposit Account No. 20-0809.

The Examiner is invited to contact Applicants' undersigned representative with questions.

Respectfully submitted,  
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